The Benefits of Going Paperless in Accounting for and Tracking SCDMV Assets

—An eInventory Proposal—

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Introduction

The South Carolina Department of Motor Vehicles includes sixty-six field offices and the main headquarters facility which is situated in the Town of Blythewood. Within each individual and remotely located field office, as well as at headquarters, are Agency fixed assets that are accounted for each year via a state-wide self-imposed DMV audit. Currently the South Carolina Department of Motor Vehicles "SCDMV" tracks and accounts for the movement of these fixed assets via a paper-based tracking system. A 'transfer' sheet, as it is called, is filled out for every 'tagged' asset that is either assigned to an individual/department/field office or returned from the same. In the event there is an exchange of assets, two transfer sheets are filled out. Both the 'receiver' and the 'transferee' are left with a carbon copy of the original transfer sheet; the original is sent back to the SCDMV Asset Manager via inter-agency mail or is personally hand delivered.

At the time of this writing the DMV has 8,200 fixed assets. These units consist of cars, scales, safes, tools, office filing cabinets, desks, shredders, chairs, computer software and hardware including, but not limited to, pc workstations, laptops, monitors, printers, and USB peripherals and other external devices. Recently, the agency desktop support team had to replace 562 PC workstations due to the expiration of the Windows XP operating system. Over 1,000 transfer sheets were hand-written and filled out during a 45 day window. These transfer sheets along with other copies that cropped up during this time frame from other departments and individuals had to be manually processed into the SCEIS /SAP system by the agency's Asset Manager.

Problem Statement

Because of the myriad of hands these transfer sheets potentially flow through, this current process is plagued by human errors and delays in records being updated timely in SCIES / SAP. The entire process is inefficient in terms of today's modern technology. Every asset with an appropriate tagged decal that is

moved or picked up must have a properly filled out transfer sheet. Transfer sheets are subject to being misplaced, permanently lost, improperly filled out {wrong dates, wrong serial numbers, wrong decal numbers, improper descriptions}, and a host of other issues. Arriving at a remote location without a stock of transfer sheets means the needed asset either is not deployed or more likely deployed with the sincere desire to remedy the situation later, which possibly may or may not happen. Each transfer sheet has to make its way back to the Blythewood facility, intact and delivered on time to the Supply Specialist. It is a significant task to place the transfer sheets in date order, scan them and then for the Asset Manager, who eventually receives them, to physically enter them into the SCEIS / SAP system. None of this is in real-time. Transfer sheets may sit on a desk to be processed for three to four weeks or longer, depending on the Asset Manager's other assigned priorities.

It is not uncommon for an I-tagged asset {technology equipment} to be repaired and replaced back into service before the first transfer sheet has been entered and processed in SCEIS. Transfer sheets can literally cross each other's paths with the older transfer sheet taking precedence in SCEIS prior to the most recent one. Looking up the current locations of assets in SCEIS is plagued by the tediously manual and single ownership of the process in which they must be entered. Weeks can go by before the records in SCEIS /SAP accurately represent where an asset is actually residing. This makes doing an annual audit supplied by Asset Management difficult. The following quote from one of the Agency's Deputy Directors conveys the hardship of this process well.

"Yearly inventory is always a challenge. Each year I spend weeks rechecking equipment and straining my eyes to read the ITAGS and serial numbers which are situated in such a position as to make a contortionist scream! In the end I always find all the equipment assign to me and surprisingly it is usually in my area. So why does it take weeks to reconcile? The process of manually completing property

transfer forms in triplicate and mailing them to our asset manager for entry has too many possible points of failure.

"The ITAG and serial numbers recorded on the property transfer forms are only as good as the technician's eyes. Even when equipment is recorded properly on the form there is the possibility of the form getting lost in the mail. Months may pass and I am totally unaware that my property transfer form has not been received and my asset list has not been adjusted. When inventory time rolls around any memory of transferred equipment has long faded away. Looking for an unprocessed property transfer form is my last thought. So what do I do? Recheck equipment!

"Surely there is a better way to track our equipment and keep our asset list current without spending weeks retracing our steps."[1]

The better way is to approach and look objectively at our current workflow for tracking our assets. The SCDMV must be open to new ways of processing any or all of this information and readily research and consider all technology that could and should make this happen. By possibility going "green," the agency may be able to migrate from our paper-based tracking system to one that is online, and one that is done in as much as possible in real-time.

Data Collection

Recognizing the scope of changing an entire Agency's process, particularly the size of one as large as the SCMDV, it was incumbent that all key personnel directly associated with the transfer sheet methodology be involved in its modification. To that end, the owners of the process, users of the process, and technological experts were called in at various times for subject matter consultation and approval for future process modification. The 'ad hoc committee' was comprised of individuals all seeking to replace, if possible, and to most definitely improve the current method of tracking the Agency's assets by transfer sheets. See Appendix A.

Transfer sheets are primarily used to track 'change of ownership.' A single transfer sheet consists of a four-color, multi-part document. The top white sheet or 'original copy' ends up in the hands of the Asset Manager, while the pink and teal copies end up in the 'receivers' and 'transferee's possession respectively. The last page or 'suspense copy' is rarely used but can be kept on-hand as a reminder of the need to obtain an outstanding signature if a transfer sheet was left with an absent individual. See Appendix B.

Transfer sheets are ordered by pack with each pack containing 50 units. At the time this information was collected, October 2014, the last quantity ordered was 105 packs at a total cost of $1,187.55 on March 19, 2013.

Tracking the movements of fixed assets through the transfer sheets process is a highly labor intensive process. Each transfer sheet consists of a possible 18 entries besides the required information such as dates, signatures, department and inventory code. Each sheet by its own make-up must be filled out manually by hand. It is imperative that each entry being filled out be accurate as that same information must be entered manually again later into the SCEIS / SAP system.

The owners of the process furnished the following information based on their own self-described conservative "average" estimates. It was determined that a single transfer sheet with a single asset to be transferred took six minutes to enter in SCEIS / SAP. An additional 19 minutes was needed to complete a single transfer sheet if all 18 available entries were filled. The latter time benefiting from the efficiency of already being logged in and working in the SCEIS / SAP system. The average Agency transfer sheet contained 15 entries. These consisted of the whole gamut of possible transfer sheet scenarios: from entire field office rollouts; warehouse deliveries, surplus pickup and everyday transfers between staff and users. From July 2013 to June 2014, the Agency processed 2,000 transfer sheets.

Drawing from these figures, it appears the Asset Manager had the task of entering over 20 weeks' worth of data this past year from transfer sheets alone.[2]

The key entry on any given transfer sheet and the one that gets the most attention because it is highly visible is the Agency's 'Asset Tag.' There are currently five asset tags or 'decals.' All decals at this time are printed outside the Agency and consist of a barcode that is affixed in a clearly visible and prominent position on each item deemed an asset. The only item 'loaded' within the barcode is the first capital letter printed on the decal as well as a five-digit number that follows. Assets tags are extremely important in their role of alerting everyone that a particular asset is being tracked. Because of their high visibility, in most cases, anyone who handles an asset with a decal immediately knows that a transfer sheet is required for its movement. See Appendix C.

Barcodes of course have been an industry standard for tracking assets for years. Everyone is familiar with them, being most visibly used successfully by the United Parcel Service. They can be printed by almost every printer type available and they can be 'loaded' with a significant amount of information and detail. While there are many types, almost all of them can be read with a single hand-held barcode scanner. They have become a way of life both for the operators and the users who are asked to interact with them. See Appendix D.

The SCDMV has had decals with barcodes attached to fixed assets for years. The concept for using them for tracking assets has also been something acknowledged as viable in years past. The problem for change has been two-fold. From all parties' perspective, exactly what is the current process? —From start to finish how is the SCDMV managing their fixed assets? Secondly, what are the current, and from a tax payers point of view, most cost effective solutions?

Let's deal with the first issue. The current workflow of tracking Agency fixed assets begins with a decision within the organization to purchase a piece of equipment through the process of the online

SCEIS shopping cart. Once the request has been approved through the proper chain-of-command, the Procurement Office issues a Purchase Order "PO" for the purchase of said item. A cost equal to or greater than $500 deems the item carry the label "a fixed asset." It must be tracked. Items below the $500 threshold also may be deemed a fixed asset as determined by the Asset Manager. The Agency has made a conscious decision to move more of the latter in this direction. Of course, this stewardship decision brings along with it the need for additional SCEIS / SAP record keeping and subsequently more transfer sheets.

All fixed assets prior to their arrival and deployment are recognized in the SCEIS / SAP by the means of its own asset shell. Created by the Asset Manager from information provided on the item's purchase order, the initial data normally contains, among other things, the purchase date, description, value and the all-important 'asset tag' or barcoded decal. The asset tags are temporally stapled to yellow documents called 'property receipts.' These property receipts are given to the initial future custodian of the newly acquired asset. Once the asset has arrived from the vendor, its serial number is recorded on the property receipt and the decal subsequently removed and affixed to the asset. Upon return of the property receipt, the Asset Manager will update the fixed asset's asset shell in SCEIS.

Once the required information is entered in SCEIS / SAP, the asset is considered "in the system" and is available for tracking and monitoring. {It should be noted that the one-size fits all approach of SAP with its limited customer-based variations requires the Asset Manager to be 'creative' in entering data where corresponding field names do not exist}. At this juncture, transfer sheets are used to account for every movement of the fixed asset. If the 'system' is followed correctly, no asset is placed, removed, given or taken without a signed transfer sheet making its way back to the Asset Manager. Unfortunately, as previously discussed and illustrated, this is not always the case. As long as there are human beings, and

human beings who interact with pen and paper, there are going to be issues. The scope of this paper has been to define those issues and make suggestions for possible solutions.

Before an asset is laid to rest due to its end of life, it must be officially 'surplused.' This is handled through a scheduled warehouse pickup, a TID {Turn-in-Document} and State Surplus. Working off their pink copies, warehouse personnel complete the TID required information and when enough assets are accumulated, notify State Surplus of the need to schedule a viewing of said assets. The TID lists the decal numbers, serial numbers and descriptions of any given asset included on a given pallet. Two other bits of information are obtained online from SCEIS: the original cost of the asset and the acquisition date. If the assets are accepted by State Surplus, they are given an SPO number {Surplus Property Office}. If State Surplus rejects them, they are considered 'junked' and the SCDMV has the option of selling them on GovDeals.com or pass them onto a reclaim center. In either case, the TID is given to the Asset Manager to process and remove such assets from SCIES / SAP. See Appendix E for all supporting documents mentioned here as well as three detailed flowcharts depicting the three workflows described in this section.

Before viable eInventory solutions could be researched and possible solutions recommended, it was essential that a thorough understanding of the current processes and workflows be completed and documented. A famous quote attributed to many different authors and highly appropriate to this paper's scope is, "you can't know where you're going until you know where you've been?"[3] Moving now from the present, and the Agency's current paper-based asset tracking system, several eInventory solutions are discussed in detail below.

Option One: Internal SCDMV Developed Solution

In looking for a viable solution to replace the SCDMV's paper-based tracking system, one of the first places considered was within the Agency itself. The Department of Motor Vehicles is well-known for its

excellent customer service and this is no better observed in practice than by its low entrance to exit customer wait times. A key factor in arriving at these low wait times was the initial development and continual improvement of the Agency's in-house Phoenix database system. With a dedicated team of developers and programmers, the SCDMV houses a tremendous resource for potentially devising and writing the code for a paperless asset tracking system.

In the context of the above, a LOE [Level of Effort] analysis was conducted on the feasibility and cost benefits, if any, of developing a paperless asset tracking system within the SCDMV's own Information Technology department. The actual breakdown of the developmental components and associated time requirements are shown in Appendix F. The LOE makes the case clearly that purchasing an off-the-shelf product with optional customization maybe more cost effective in terms of in-house software development man hours and the estimated final product delivery. The most difficult component being the significant programming that would be required to develop the code for any hand-held device. Because of the amount of testing and issue-resolving matters that would likely be involved with this in-house solution, the lead Systems Architect recommended the time estimates of the LOE be raised by 50% and the programing rate at $90 an hour. With the proceeding adjustments made to the original LOE, the projected cost for developing an internal eInventory solution came out at $65,430 with over 727 hours in programming development.

Option Two: Outside Vendor-based Solutions

From the very beginning, purchasing an outside the Agency vendor eInventory solution was considered. The reason is obvious. Asset tracking software is everywhere and is also highly advertised and promoted. A quick search on Google.com will provide a listing of almost a dozen vendors and sources. At least six vendors have been contacted during the course of this research and documentation. Three of them have been extremely responsive to the Agency's inquiries and amongst them have provided

conference calls, software demos, documentation, email support and loads of product information. In trying to set the agenda with these various vendors, a 12-point eInventory document was created listing the various initial requirements of any product replacement for our current paper-based system. The three most responsive vendors all have products that meet the 12-point criteria. See appendix G.

It is beyond the scope of this paper to discuss in particular these vendors and to go into depth of each of their potential solutions. However, all of them provide an immediate paperless based tracking system with real-time monitoring and tracking. Each brings to the table support for a SQL backend, a database that can be one-time back loaded from SCEIS / SAP, and robust logging and reporting capabilities. Several offer the component of a handheld barcode scanner in their solution. Some are browser-based {the preferred choice}, while others utilize an Access front-end. All are advertised as highly customizable and each offers a very specific set of privileges and permissions based on a user's login. Additionally, most of the vendor solutions researched offer some means of providing alerts or receipts for those receiving or those transferring assets.

All of the major vendors contacted by phone emphasized their familiarity with SAP and gave assurances that they would work with the Agency not only to one-time back load their solutions with existing SCEIS / SAP data, but that they had the ability to export their data into SCEIS / SAP as well. This is taking the initial scope of this paper one step further than intended, but a step that was intriguing early on during the research leading up to these eInventory solutions. The ability to export any vendor's data into SCEIS / SAP overnight would potentially eliminate not only the paper-based tracking system, but would at the very least reduce the data entry needed to be done daily by the Asset Manager. If all of the asset tracking data was imported directly into SCEIS, the Asset Manager would only need a means of verifying such imported data accurately reflected what was in the Agency's database. Such verification means

was looked into and possibilities exist. Appendix H offers three detailed flowcharts depicting what the impact of a vendor supplied eInventory based system might have on the Agency's current workflow.

One of the most intriguing vendor supplied inventory tracking systems evaluated and briefly looked into was an RFID based system. RFID stands for Radio Frequency Identification. In this type of tracking system, each fixed asset is given an RFID tag or transponder. The RFID tag contains two components, an antenna for transmitting and receiving signals, and an integrated circuit which stores the tag's ID and other information. The signal from the RFID chip is picked up by a RFID antenna and is passed onto a RFID reader which in turn passes the information onto computer. Basically the system acts like a very specialized GPS. Anytime an asset moves from one location to another, antennas and readers placed throughout the building will pass the information onto the main data collecting computer. All of this is done in real time with no hands on intervention. As one might suspect, RFID technology is not inexpensive and is ideally suited for a small single plant environment.[4]

Option Three: SCIES State Government Solution

In working with the SCEIS team on the ability to import and export data from a vendor's eInventory solution, it was discovered DOT was utilizing an asset tracking module provided by SCEIS themselves. The SCEIS solution works on the basis of two roles. The "sender" being the individual in possession of the asset and the initiator of transference. The "receiver" being the individual who will take over responsibility for the asset.

The premise with the solution offered by SCEIS is that every manager has a cost center assigned to them. These cost centers are already setup and defined in the SCEIS / SAP system. Under this eInventory proposal, all assets would no longer fall under any individual employee's names or employee numbers. This is as a result of cost centers being a management level privilege and access right. While this process would place more assets under the direct responsibility of management, which some managers would

prefer not to do for obvious accountability issues, it has been discussed as a workable solution. Indeed, this asset accountability is already in place in all 66 SCDMV field offices. The exception being Headquarters where there is a blend of assets being in both manager's employee numbers and others being assigned directly to front line staff members.

The SCEIS asset management solution works off of workflows which are the electronic transfer forms sent to all parties set up in the system. Once the workflow is created, it is automatically routed. Within the SCEIS system, a logged in manager would have access to email communications involving any asset they send or receive to another individual manager and their associated cost center. Additionally, key personnel within the SCEIS / SAP system can be added as recipients to all asset workflow notifications taking place within an Agency's cost centers. The SCDMV's official Asset Manager would be able to monitor all transactions taking place and would have a means of surveying and, if necessary, evaluate any asset transfer deemed questionable.

Transfers as initiated by the "sender" fall within three status positions inside the SCEIS asset tracking system. The first is 'approved' when the receiver of the asset acknowledges via the SCEIS / SAP notification in their inbox that they have willfully taken ownership of the newly acquired asset. All parties to the transaction as well as any additionally assigned notification designees receive a confirmation email stating the above transaction has been accepted. In the same venue, any asset transfer by the "sender" that is 'rejected' by the receiver, is labeled as such and again all parties to the notification are made aware of development. The last status is where an asset is placed on 'hold.' As in both cases previously, all individuals setup in the SCEIS / SAP notification workflow receive an associated email stating the transference delay. Upon eventual acceptance or rejection, a final notification will be sent to all interested parties stating the former has taken place.

This asset tracking solution offers many positive features including robust searching capabilities and reporting features as is standard with a SAP backed system interface. It is already built around a system in place within the state's infrastructure. Besides the new paradigm shift with all assets being in the manager's personnel number, the other issue that requires some sort of resolution is the lack of physical receipt that now accompanies a transfer to an individual staff member. Any asset provided to a front line employee at Headquarters is now tracked for accountability purposes by the pink copy of a filled out transfer sheet. With their credentials on the designated transfer sheet, there is a means of recourse for a manger whose employee no longer can furnish the location of the assigned asset. Creative solutions exist for this problem such as an Excel spreadsheet delineating all assets and ascribed employee initials designating acceptance for each asset as listed. See Appendix I for the transfer process as provided by SCEIS. Additionally, see supporting documents for exporting and the verification of data from a third-party vendor into SCEIS / SAP.

Summary and Conclusion

Change is difficult, but the time for change with the SCDMV asset tracking system is now. See Appendix J for a textbook case example. Technology has made obsolete the old, if somewhat reliable, methods of the past. Gone for the most part are the old accounting ledgers, replaced with highly sophisticated and highly accurate accounting software. Today's society has gone green, if not for the environment, definitely for the financial cost savings associated with not having to print and handle volumes of paper-based materials and products. Banks and all sorts of businesses now promote or strongly encourage going online. Even the SCDMV has migrated a vast sum of transactions that only a few years back had to be done in a local field office, but which today can be done online from the comfort of one's own home.

With the need to be good stewards of the public's resources and hence Agency assets, it is time to bring the SCDMV's asset tracking system to a new level. Going to a paperless eInventory solution will offer

improved accuracy, convenience, cost savings and the ability to track and monitor assets in real time. The good news is the perception for this need is everywhere within the Agency. It is accepted that a process improvement for the current paper-based tracking system can be found and that a viable solution can be implemented. Indeed, in this paper several solutions have been presented. No doubt, with a little more effort others can be found as well. The SCDMV has become in almost every corner of the state a model agency. Given the resources, time and talent of the Agency, an eInventory solution will not just be an option, but a future reality.

Notes & References

[1]Agency Deputy Director, November 24, 2014.

[2] [((15/18*19) +6)*2000 / 420 minutes in a 7 hour working day and that total / by five working days.]

[3]Quoteland.com, http://forum.quoteland.com/eve/forums/a/tpc/f/99191541/m/4301937495.

[4]The Basics of an RFID System, atlasRFIDstore.com, pp. 3-11.

Appendix A: eInventory Team Partners

Process Owners

- SCDMV Inventory Management Manager
- SCDMV Warehouse Manager
- SCDMV Asset Manager

Direct Users

- SCDMV Deputy Director Contact Center
- SCDMV Desktop Support Supervisor
- SCDMV Supply Specialist III
- SCDMV Warehouse Staff

Technical Consultants and Resources

- SCDMV IT System Architect
- SCDMV Network Administrator
- SCDMV SQL Database Admin
- SCDMV Software Developer
- SCEIS IT Resource Consultant

Agency Leadership Consultants

- SCDMV Chief of Staff
- SCDMV Chief Information Officer

Appendix B

Sample Transfer Sheet

White Copies — Asset Manager

Pink Copies — Receiving Asset

Teal Copies — Transferring Asset

Yellow Copies — Suspense

SOUTH CAROLINA DEPARTMENT OF MOTOR VEHICLES

PROPERTY TRANSFER

DATE: 12-9-14 NUMBER: 430076

DMV NUMBER	PROPERTY DESCRIPTION	REMARKS (SERIAL NO., ETC.)
D00147	Canon Scanner	FQ313218
S04268	Dell Optiplex 780 PC	JZØYFQ1
S06912	Dell Optiplex 7010 PC	3854LØ2
T00115	Kyocera P2135D Printer	LXQ32ØØØ7Ø
I05556	Dell Tablet J3400	00314816-J3400

TRANSFERRED BY: Sally Sue
SIGNATURE: Sally Sue
SOCIAL SEC. NO.: 000-00-1234
TITLE: IRC 1
SECTION / OFFICE # : IT/DMV
DATE: 12-9-14

RECEIVED BY: John Jacob
SIGNATURE: John Jacob
SOCIAL SEC. NO.: 000-00-6789
TITLE: IRC 2
SECTION / OFFICE # : IT/DMV
DATE: 12-9-14

RETURN TO: SCDMV INVENTORY CONTROL
ORIGINAL COPY

VOIDED, DAMAGED, OR UNUSED FORMS SHOULD BE RETURNED TO INVENTORY CONTROL

FA101 (REV. 10/03)

SOUTH CAROLINA DEPARTMENT OF MOTOR VEHICLES

PROPERTY TRANSFER

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DMV NUMBER	PROPERTY DESCRIPTION	REMARKS (SERIAL NO., ETC.)
I05556	Dell Tablet J3400	00314816-J3400
T00115	Kyocera P2135D Printer	LXQ3200070
S06912	Dell Optiplex 7010 PC	3854L02
S04268	Dell Optiplex 780 PC	J20YFQ1
D00147	Canon Scanner	FQ313218

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PERSON TRANSFERRING (COPY)

FA101 (REV. 10/03)

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PERSON RECEIVING (COPY)

FA101 (REV. 10/03)

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SUSPENSE (COPY)

FA101 (REV. 10/03)

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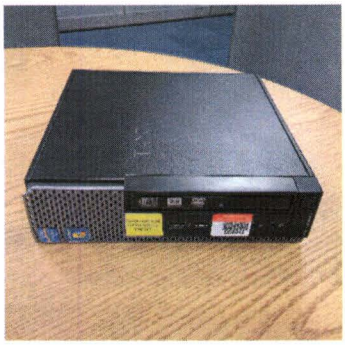
FA101 (REV. 10/03)

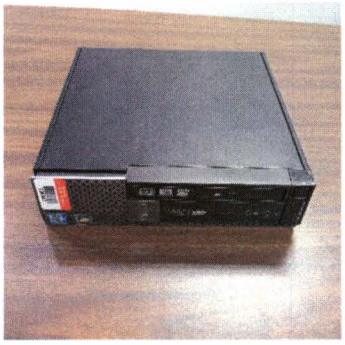
Appendix C: Agency Decal {Asset Tags} Types



D-Tag on Grant Funded Asset

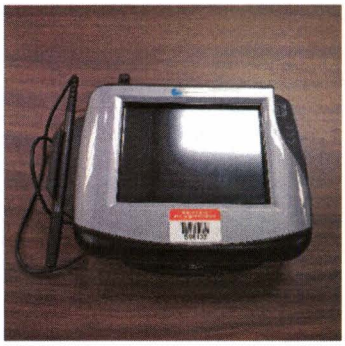
I-Tag on Technology Equipment

G-Tag on Office Furniture



S-Tag on Technology Equipment

G-Tag on Office Furniture



S-Tag on Technology Equipment

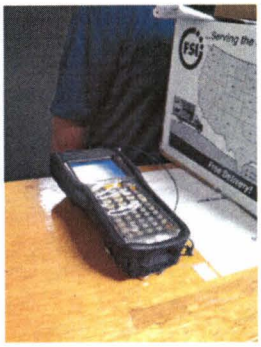
I-Tag on Technology Equipment

T-Tag on Technology Equipment

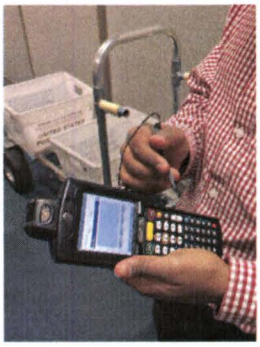
Appendix D: Real Life Examples

These original photographs were taken spontaneously as they occurred during the preparation and research for this report.

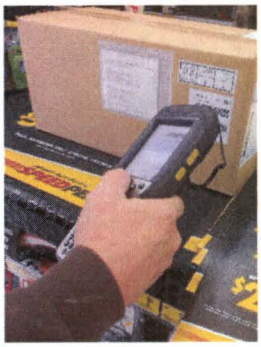
Barcode Handheld Scanner



Durable and Lightweight



Portable and Convenient

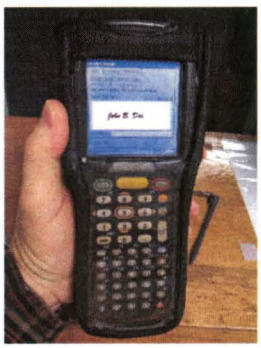


Simple to Use & Paperless

Point and Scan Technology

Customer Friendly

Easy to Read Interface



Accurate & Clear Accountability

Appendix E:

Flowcharts of Current Process

Workflow of Asset Management: Property Receipt

Workflow of Asset Management: Property Transfer Sheet

Workflow of Asset Management: Turn-in-Document

Purchase Order Sample

Asset Shell: General Tab

Asset Shell: Time-Independent Tab

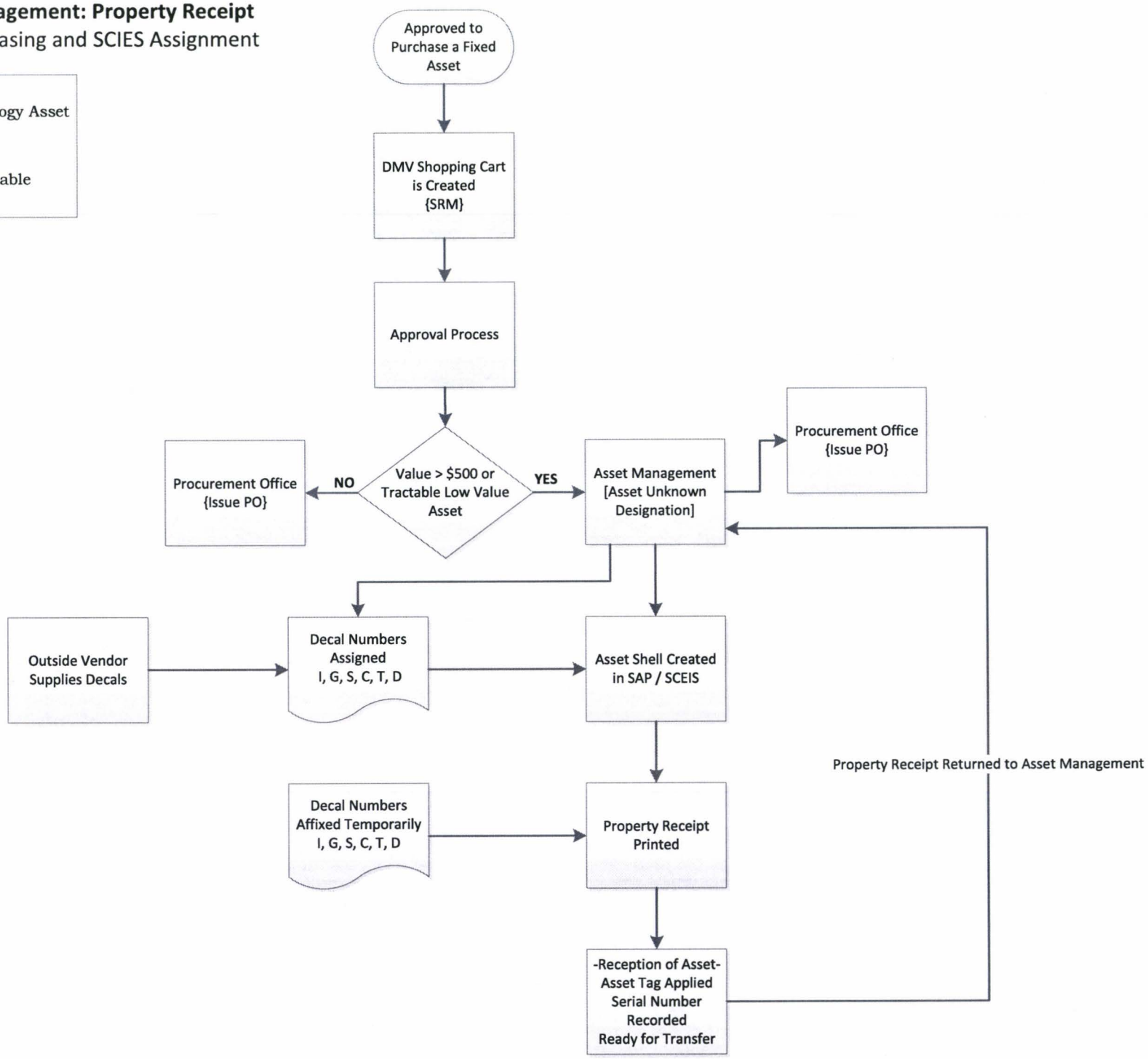
Property Receipt Sample

TID

Workflow of Asset Management: Property Receipt

Depiction of Asset Purchasing and SCIES Assignment

Decals	
I-tag	Information Technology Asset
G-tag	Office equipment
S-tag	Assets > $500.00
T-tag	Assets deemed traceable
D-tag	Grant Funded Assets

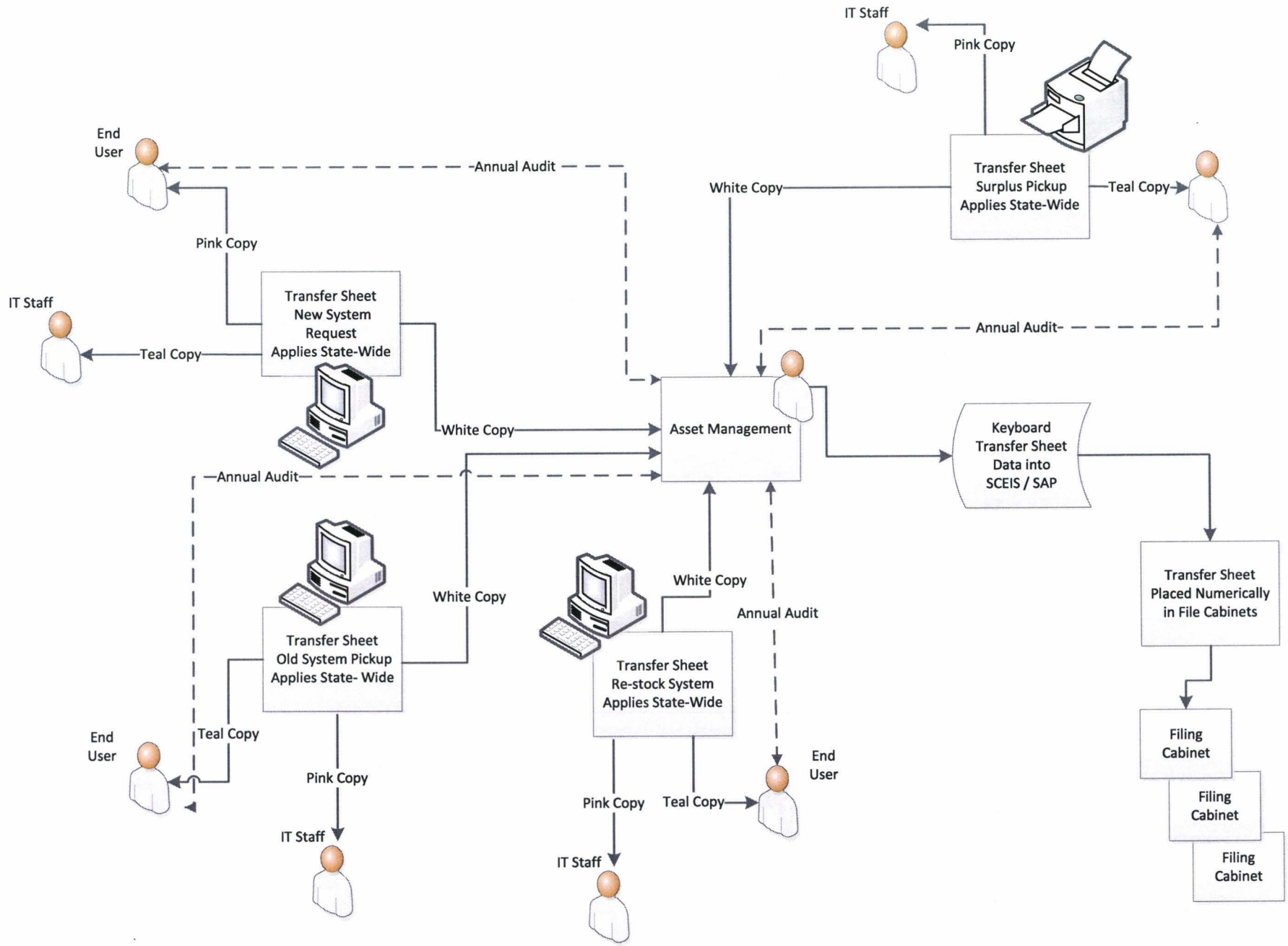


Workflow of Asset Management: Property Transfer Sheet

Depiction of IT Assets Movements only {Diagram Simplicity}

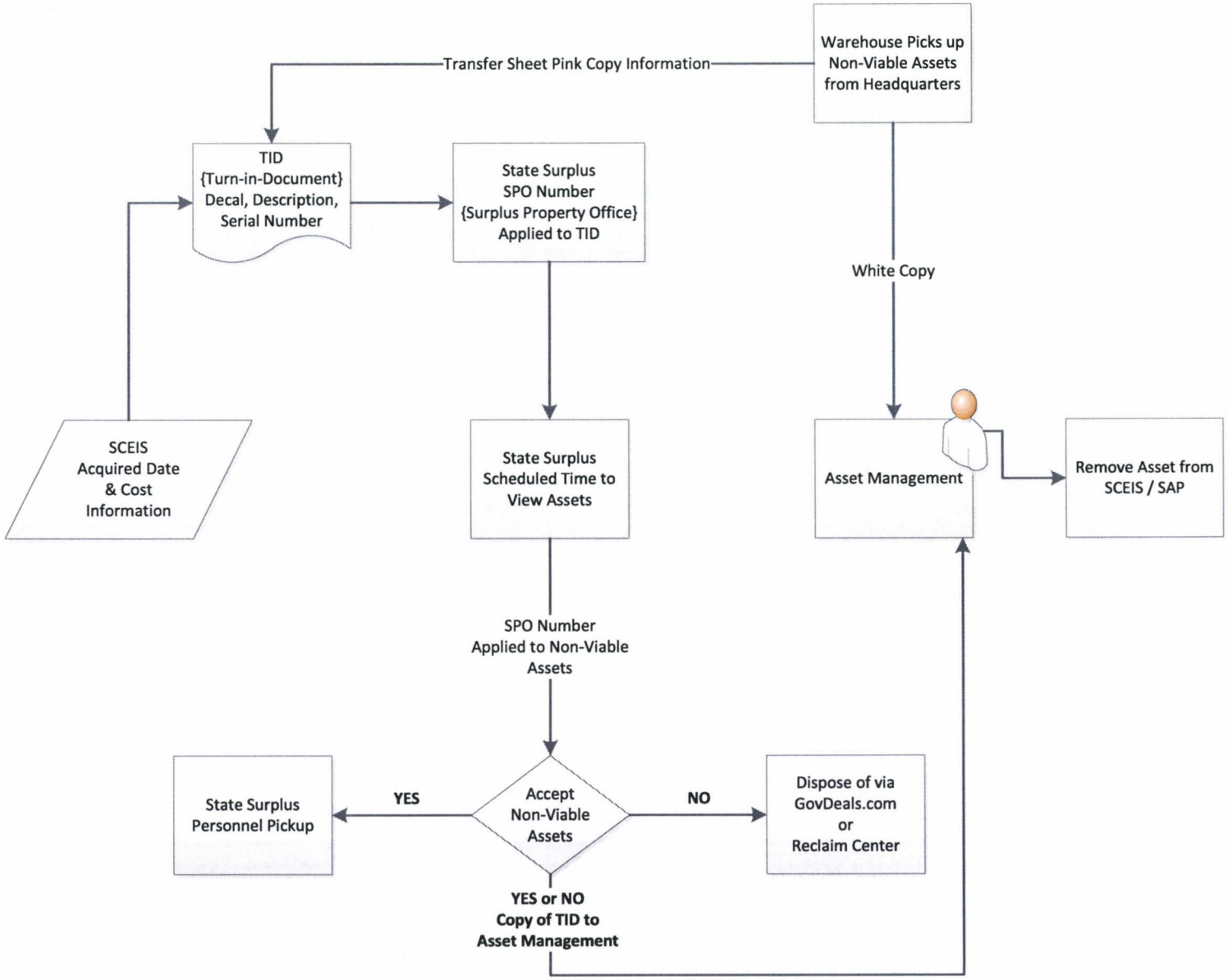
-Transfer Sheet Usage is Simply a Receipt to Track Movement-

Transfer Sheet
— White Copy = Original
— Pink Copy = Receiving Party
— Teal Copy = Transferring Party



Workflow of Asset Management: Turn-in-Document

Depiction Assets and their Interaction with State Surplus



PURCHASE ORDER
DMV Administration

Sample

Purchasing Office:

SC Department of Motor Vehicles
Attn: Procurement Office
10311 Wilson Boulevard - Bldg. C
Blythewood, SC 29016

Invoice To:

SC Department of Motor Vehicles
Attn: Accounts Payable
PO Box 629
Blythewood, SC 29016

Purchase Order Number 123456789
Date Issued: 02/1/2015

PO Number must appear on all Invoices and Delivery Slips.

Payment Terms:
Within 30 **Days** 0.000 **Percent Discount**

Vendor: **70000xxxxx**
Bluechip Technology
100 No Such Street
Greenville, SC 12345

Deliver To:
SC Department of Motor Vehicles
10311 Wilson Blvd.
Blythewood, SC 29016

INSTRUCTIONS TO VENDOR

Item No.	Quantity	Unit of Measure	Description	Unit Price	Amount
0001	1	1	Kiosk Workstation I02345	2,000	2,000
0002	1	1	Kiosk Workstation Stand S01234	500	500

Created By: John Smith

Total: $2,500

Sample

Authorized Signature: **If received electronically, printed name represents authorized signature for this document. All sales to the State of South Carolina (SC) are subject to the SC sales and use tax laws, unless such sales are otherwise exempt. The Contractor/Vendor will collect such tax as required**

Asset Edit Goto Extras Environment Settings System Help

Display Asset: Master data

Asset values

Asset 290000030508 0 VIISAGE IMAGECAM CAMERA SYSTEM

Class 29900 SCEIS_LowValue Asset Company Code SC01

General | Time-dependent | Allocations | Origin | Leasing | Deprec. Areas

General data

Description	VIISAGE IMAGECAM CAMERA SYSTEM	
Asset main no. text	VIISAGE IMAGECAM CAMERA SYSTEM	
Acct determination	29900	SCEIS_Low Value Assets Less Than $4,999.99
Serial number	2-1300	
Inventory number	I03957	
Quantity	1	EA each

☐ Manage historically

Inventory

Last inventory on	04/04/2012	☑ Include asset in inventory list
Inventory note		

Posting information

Capitalized on	11/01/2007	Deactivation on	
First acquisition on	11/01/2007		
Acquisition year	2008 005	Ordered on	

Asset Edit Goto Extras Environment Settings System Help

Display Asset: Master data

Asset values

Asset	290000030508	0	VIISAGE IMAGECAM CAMERA SYSTEM	
Class	29900		SCEIS_LowValue Asset	Company Code SC01

General | Time-dependent | Allocations | Origin | Leasing | Deprec. Areas

Grant	NOT RELEVANT	Not Relevant for GM
Funds Center	R400TD0000	Equip. Replacement

More Intervals

Additional Data

Region	4930-SYSTEM SHARED SERVICES
Site	DMV ITO STOCK RM
County	40
Building	PT424704,428968,409262,421399,422664
Room	
Custodian	999-99-0095
Property Transfer	433637
Property Receipts	2359
Federal Participation Share Percentage	0.00

106215

SCDMV
PROPERTY RECEIPT

DATE: 12/11/2014 P.O. #: 15002453258

DMV # 106215 SCEISAssetNo 150000000123 PRNumber: 9604

DESCRIPTION: DELL 759 PC

SERIAL NUMBER / VIN: LICENSE TAG #:

MANUFACTURER: DELL MARKETING

BY MY SIGNATURE BELOW I ACKNOWLEDGE RECEIPT AND ASSUME ACCOUNTABILITY FOR THE LISTED PROPERTY HEREON. I CERTIFY THAT I HAVE AFFIXED THE DMV PROPERTY NUMBER SHOWN ABOVE TO THE PROPERTY DESCRIBED.

JOHN DOE
NAME (PRINT OR TYPE)

888-88-8888
SOCIAL SECURITY NUMBER

COPY

SIGNATURE

IT SYSTEMS SERVICES
DIVISION

DATE

3049
SECTION NUMBER

This property receipt is for equipment purchased by your section. Once the equipment has been received, please affix the DMV decal to the equipment. You must clearly list the SERIAL NUMBER, DATE and provide your SIGNATURE. For items without a serial number please list "NONE".

Upon completion of this form, please make a copy for your records.

If the equipment is transferred or reassigned by you, an IT Technician, a private vendor, or another employee, you MUST submit a DMV Property Transfer form to Inventory Control to transfer the equipment from your inventory

RETURN TO: **SCDMV**
Attn: ASSET MGMT,
10311 Wilson Blvd. Bldg. WHSE A
Blythewood, SC 29016

Form No. 1 (Rev 10/87)

TURN-IN DOCUMENT (TID)
SURPLUS PROPERTY

TO: SURPLUS PROPERTY OFFICE
1441 BOSTON AVENUE
WEST COLUMBIA, S.C. 29170

PAGE 1 OF _____

SPO USE ONLY
SPO CONTROL NO. _____
DATE SCHEDULED FOR PICKUP OR DELIVERY _____

1. DATE MAILED _____ 2. AGENCY REPORT NO. _____ 3. TOTAL A/C COST $ _____

4. FROM: AGENCY NO. _____ NAME: _____ ADDRESS: _____

CITY, STATE AND ZIP CODE _____ TELEPHONE NO. _____

5. REIMBURSEMENT REQ. ____ YES ____ NO FUND CODE TO BE REIMBURSED (IF ANY) _____

6. AGENCY CONTACT PERSON: NAME _____ ADDRESS _____

CITY, STATE AND ZIP CODE _____ TELEPHONE NO. _____

7. REPORT APPROVED BY: NAME _____ TITLE _____ SIGNATURE _____

8. DATE REQUESTED FOR DELIVERY OR PICKUP: _____ 9. LOCATION OF PROPERTY _____

10. RELEASED BY: SIGNATURE (AGENCY) _____ DATE _____ 11. SCREENED BY: _____ DATE _____

12. RECEIVED AT SPO: SIGNATURE _____ DATE _____ CYCLE NO. _____

13. SURPLUS PROPERTY LISTINGS:

ITEM NUMBER (A)	COMMODITY CODE (B)	YEAR PURCHASED (C)	DESCRIPTION (D)	DECAL NUMBER (E)	QUANTITY (F)	UNIT OF MEASURE (G)	ACQUISITION COST PER UNIT (H)	ACQUISITION COST TOTAL (I)	SPO USE ONLY COND. SERVICE CHG S OR J (IF APP.) (J)	(K)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
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25										
26										
27										

Appendix F: eInventory Level of Effort

Business Objective

Convert current inventory process from paper to an electronic application.

Functionality

- Initial Load
  - Populate new database by importing existing inventory data from SCEIS
- Manage Assets
  - Asset is defined as a physical object that requires inventory tracking
  - Create, Modify and Delete assets
- Manage Locations
  - Location is defined as a place that an asset can exist
  - Create, Modify and Delete assets
- Manage Person
  - Person is defined as a DMV employee who can be assigned an asset
  - Create, Modify and Delete assets
- Inventory Transfer
  - Assign an existing asset to a location and person
  - UI should be in portable device such as iPhone as well as a desktop screen
  - Tech UI to allow single transfer of asset
  - Warehouse UI to easily allow bulk transfer of assets
- Reports
  - Showing asset counts and associated locations/employees
- Update SCEIS
  - Nightly batch job creates SCEIS compatible file to update DMV inventory in SCEIS database

Task	Hours	Comments
Design Solution	25	
Create Database	10	
Load Data from SCEIS	25	
Manage Assets	30	
Manage Locations	30	
Manage Person	30	
Inventory Transfer		
Desktop UI	30	
Handheld Device	240	
Reports	40	
Update SCEIS	25	
	485	**Total Hours**

61 **Days of Development**

Appendix G: eInventory Vendor Requirements

1. Solution will not be cloud-based. All data must be stored on the local premises

   —This addresses security concerns.

2. Solution will interface with SQL database backend.

   —This addresses residence and type of data being stored.

3. Solution allows for a one-time importation of data from SCEIS / SAP.

   —This addresses 'loading' of existing barcodes and avoiding re-keying of existing data.

4. Solution allows for the on-demand exportation of data into SCEIS / SAP.

   —This addresses integration into our existing workflow and eliminating the need for manual data entry and verification.

5. Solution supports enterprise-wide accessibility via Windows 7 shortcut to application on server.

   —This addresses the need for users without a mobile barcode scanner to be able to enter the transfer of assets within the local confines of their department or field office.

6. Solution support barcode scanning via mobile barcode scanner device.

   —This addresses the need for mobile scanning versatility for those involved with a majority of the requirement to handle assets transfers.

7. Solution supports user signatures, employee numbers or uniquely assigned pin numbers.

   —This addresses the need for asset transfer authentication and assignment via the Windows screen-based data entry or the scanning version based on hand-held barcode scanners.

8. Solution supports access level permissions to database.

   —This addresses the need for administrative, data entry, editing and viewing only permissions.

9. Solution supports user accounts derived from Active Directory.

   —This addresses the desire to use an existing database containing active agency personnel.

10. Solution supports some type of electronic receipt for end users.

    —This addresses the need to provide users involved in the receiving or transferring of assets an acknowledgement that such a transaction has been completed.

11. Solution supports the customization of fields and reports.

    —This addresses the need for flexibility unique to every organization.

12. Solution supports batch scanning of assets under one transaction number.

    —This addresses the need for a myriad of assets to fall under the assignment of one transaction number {formerly transfer sheet number} when such inventory is assigned to one person or entity.

Appendix H:

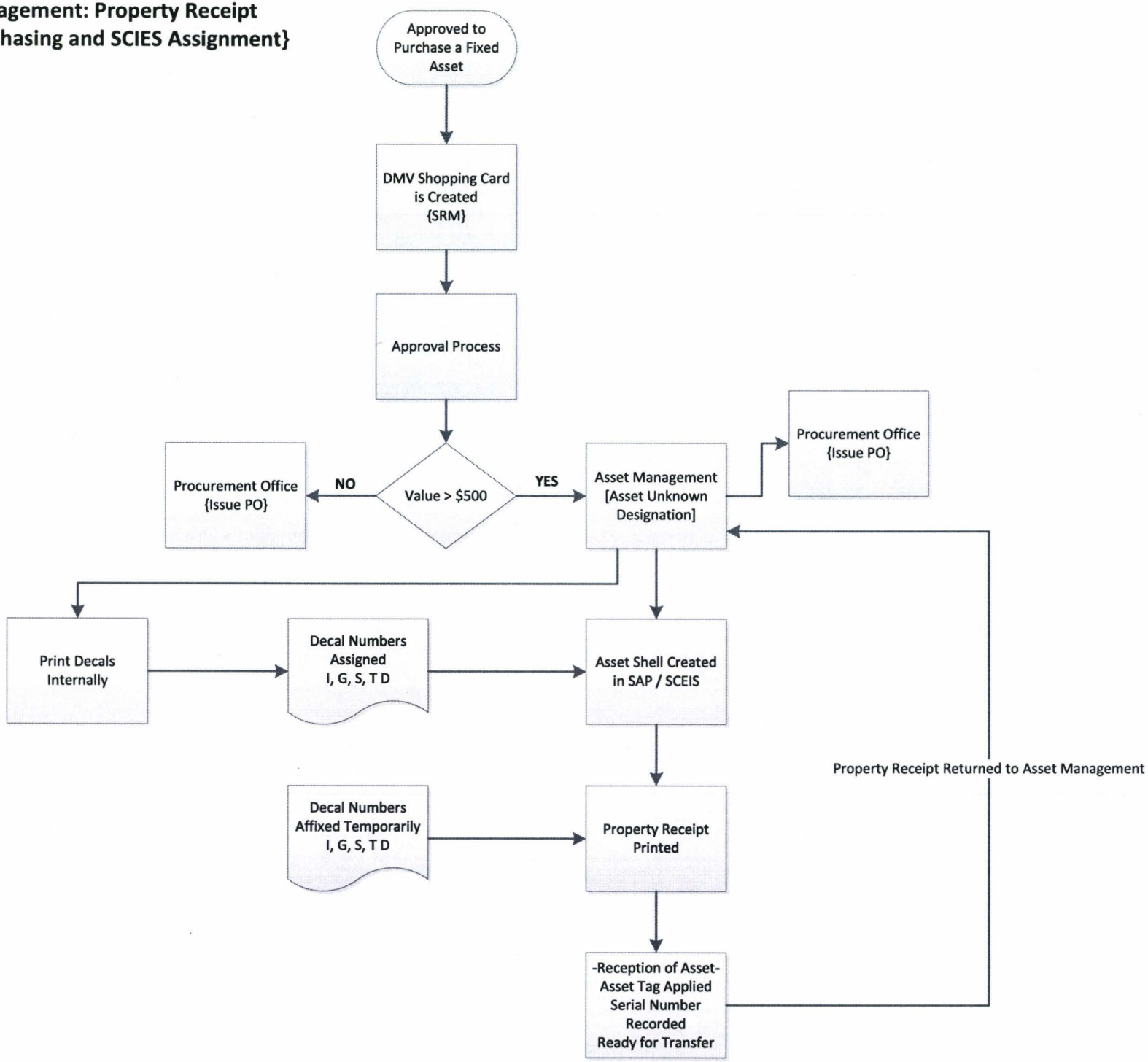
Flowcharts of eInventory Process

Workflow of Asset Management: Property Receipt

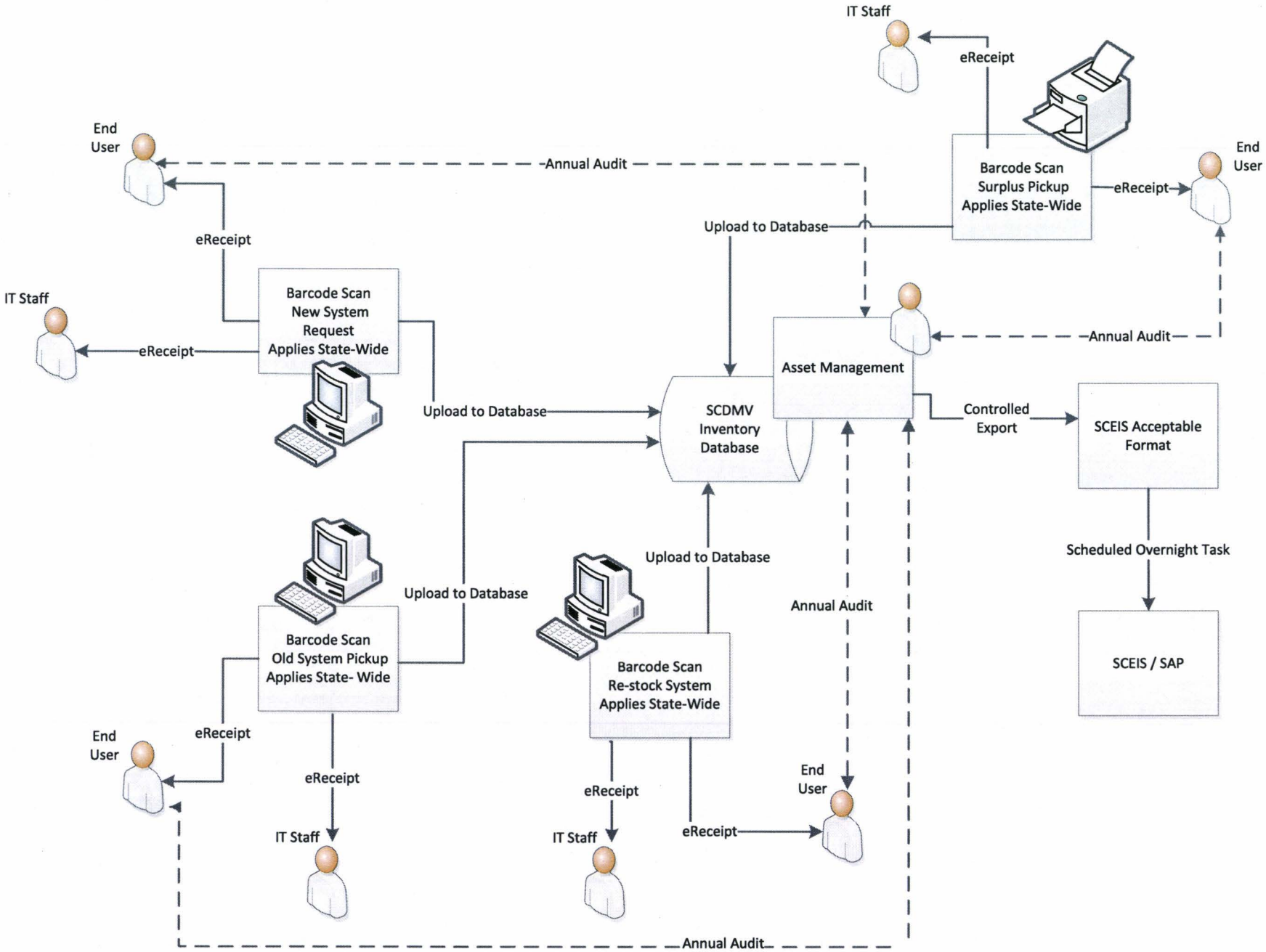
Workflow of Asset Management: Barcode Scanning

Workflow of Asset Management: Turn-in-Document

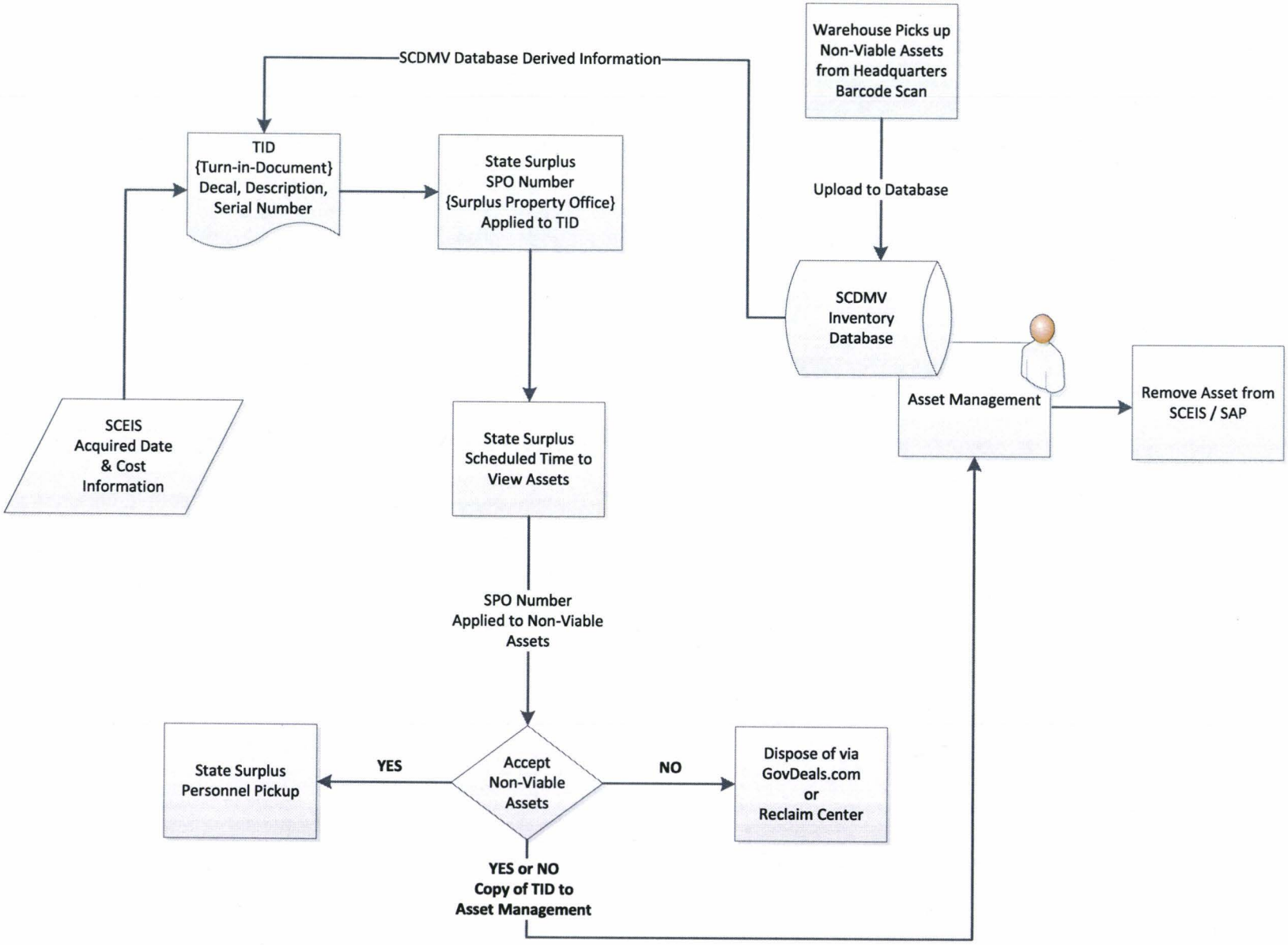
Workflow of Asset Management: Property Receipt
{Depiction of Asset Purchasing and SCIES Assignment}



Workflow of Asset Management: Barcode Scanning
{Depiction of IT Assets only for Diagram Simplicity}



Workflow of Asset Management: Turn-in-Document
{Depiction Assets and their Interaction with State Surplus}



Appendix I:

SCEIS Asset Transfer Process

SCEIS Web Enhancement Request

SCEIS Data Import Verification

SCEIS Interface Operations Guide

SCEIS

South Carolina Enterprise Information System

LESSON 2: TRANSFER PROCESS

Asset Transfer Process

SCEIS
South Carolina Enterprise Information System

- ZMASTR
  - Transaction Code to initiate transfer process between Responsible Cost Centers
- First Time Setup Process
  - Create Variant for Responsible Cost Centers
    - One Time Setup Process
  - Variant should be used every time for Transfer Process

Responsible Cost Center Variant

SCEIS
South Carolina Enterprise Information System

- ZMASTR
  - Click on Dynamic Selection
  - Click on Time Dependent Folder
  - Double Click on Responsible Cost Center Field
  - Enter your 10 digit Cost Center Value(s)
    - You can enter one than more Responsible Cost Center
  - Click on Go to > Variant > Save as a Variant
    - Define your variant with a unique identifier for your area
      - Variant Name (14 Char) – DIST 1 SIGNAL
      - Variant Meaning (30 Char) - District 1 Signal Shop

Transfer Process - ZMASTR

SCEIS
South Carolina Enterprise Information System

- ZMASTR
  - Click on Get Variant Button
  - Double Click on your Variant

ABAP: Variant Directory of Program ZRABEST_ALV01

Variant catalog for program ZRABEST_ALV01

Variant name	Short description
CUS&SCEIS_WF	WorkFlow variant
U120E1C321	Example
U120E7C381	Example

View Asset Balance Report

SCEIS
South Carolina Enterprise Information System

View Asset Balances Report

- Click on the Execute Icon
- You will view an output report listing your Assets
- Select the Assets you wish to transfers

List Edit Goto Settings System Help

Asset Balances

Create

Report date: 12/31/2011 Asset Balances - 01 Modif.Accrl.
Created on: 08/15/2011

CompanyCode	BusinessArea	Bal.sheetitem	Bal.sh.acctAPC	AssetClass
SC01	U120	8000000	1801010000	00014000

	Asset	SNo.	Asset description	Crcy	Rsp.CCtr	Cost Ctr	Invent. no	No.Objects	Amount
☑	140000018197	0	Test Transfer Tim	USD	U120E1C321	U120E7C381	123456	1	25,000.00
*	Asset Class		00014000		SCEIS_Vehicles				25,000.00
**	Acquisition:Acquis.		1801010000		VEHICLES&TRANS-MA				25,000.00

Report date: 12/31/2011 Asset Balances - 01 Modif.Accrl.
Created on: 08/15/2011

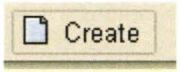
CompanyCode	BusinessArea	Bal.sheetitem	Bal.sh.acctAPC	AssetClass
SC01	U120	8000000	1801016000	00015400

	Asset	SNo.	Asset description	Crcy	Rsp.CCtr	Cost Ctr	Invent. no	No.Objects	Amount
☑	150000007893	0	ARRAY STORAGE TEK FLX240 RACK D240DR4	USD	U120E1C321	U120E1C321	TBD	1	5,000.00

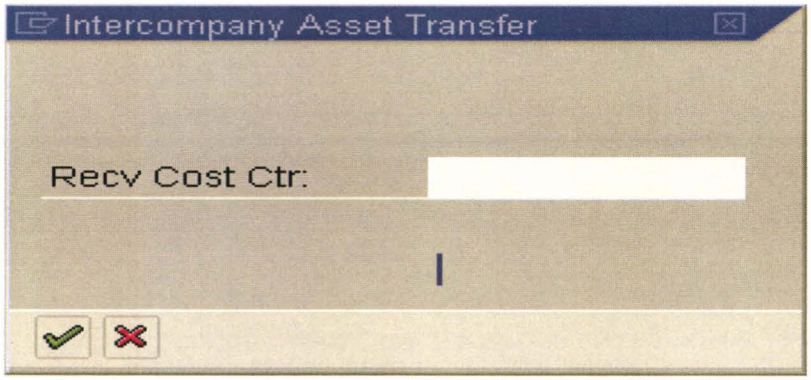
Initiation of Transfer Process

SCEIS
South Carolina Enterprise Information System

Initiation of Transfer Process

- Click on the Create Icon 

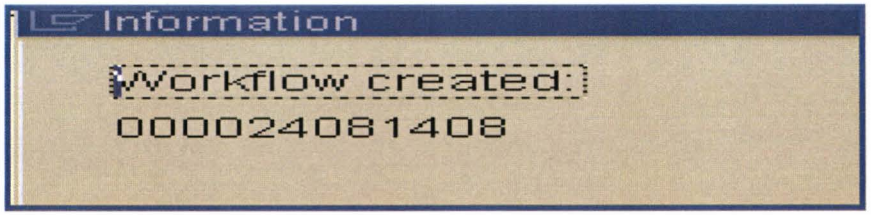
- You will enter the Responsible Cost Center that you are transferring the Asset to
  - IMPORTANT – Assets will be routed based upon the Responsible Cost Center and the person identified within that area. There is a Drop Down to see all Responsible Cost Centers.
  - Click Enter (Green Check)



Initiation of Transfer Process cont.

SCEIS
South Carolina Enterprise Information System

- The Pop Up Box displayed below lets you know the Workflow has been created
- The Receiving Party will receive a notification in their SAP Inbox

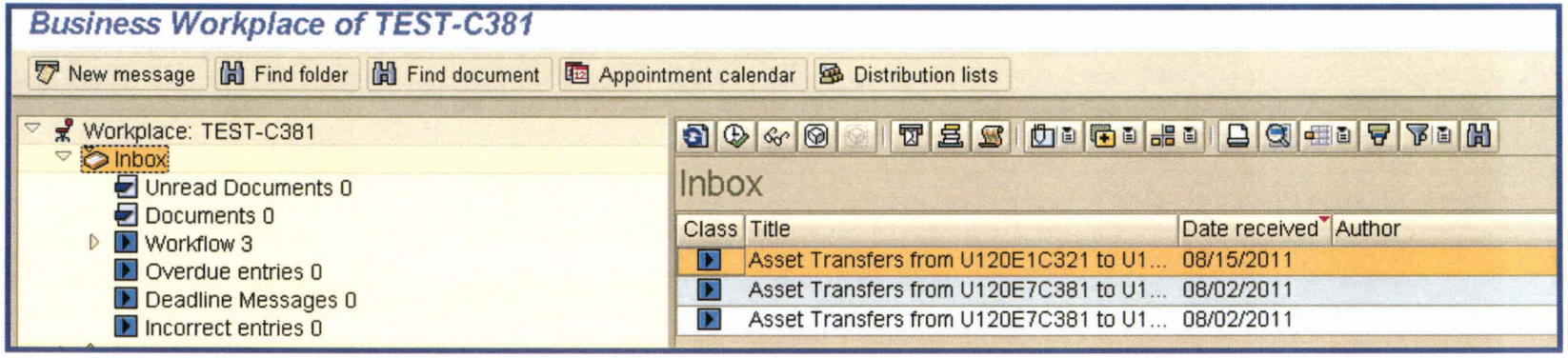


Receiving Party Approval

SCEIS
South Carolina Enterprise Information System

Receiving Party Approval

- Click on the SAP Box
- Click on the Folder Next to the Inbox Icon



Double Click on the Line to see the Assets being Transferred to your Responsible Cost Center

Receiving Party Approval cont.

SCEIS
South Carolina Enterprise Information System

Receiving Party Approval

- You will see the Assets you need to approve/reject

Assets for Transfer

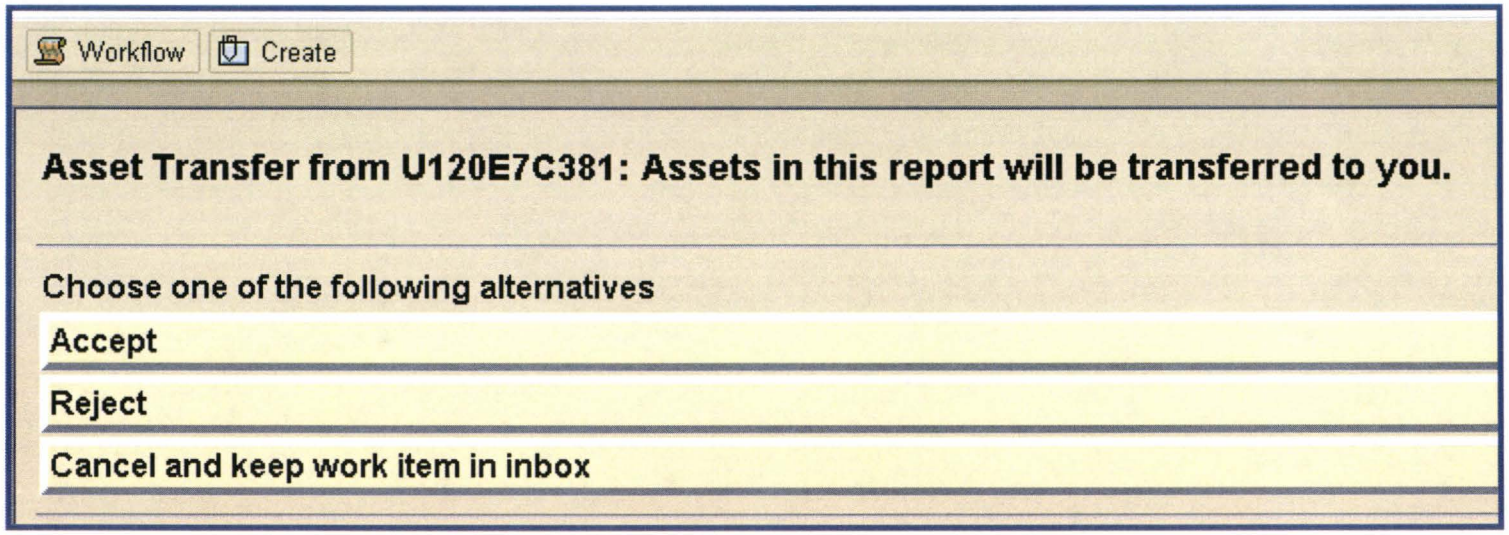
Workflow ID	Asset	SNo.	Asset Class	Asset description	Inventory number
24081408	140000018197	0	14000	Test Transfer Tim	123456
24081408	150000007893	0	15400	ARRAY STORAGE TEK FLX240 RACK D240DR4	TBD

- Click on the Green Arrow Back
- Click on Complete Work Item

Receiving Party Approval cont.

SCEIS
South Carolina Enterprise Information System

Receiving Party Approval

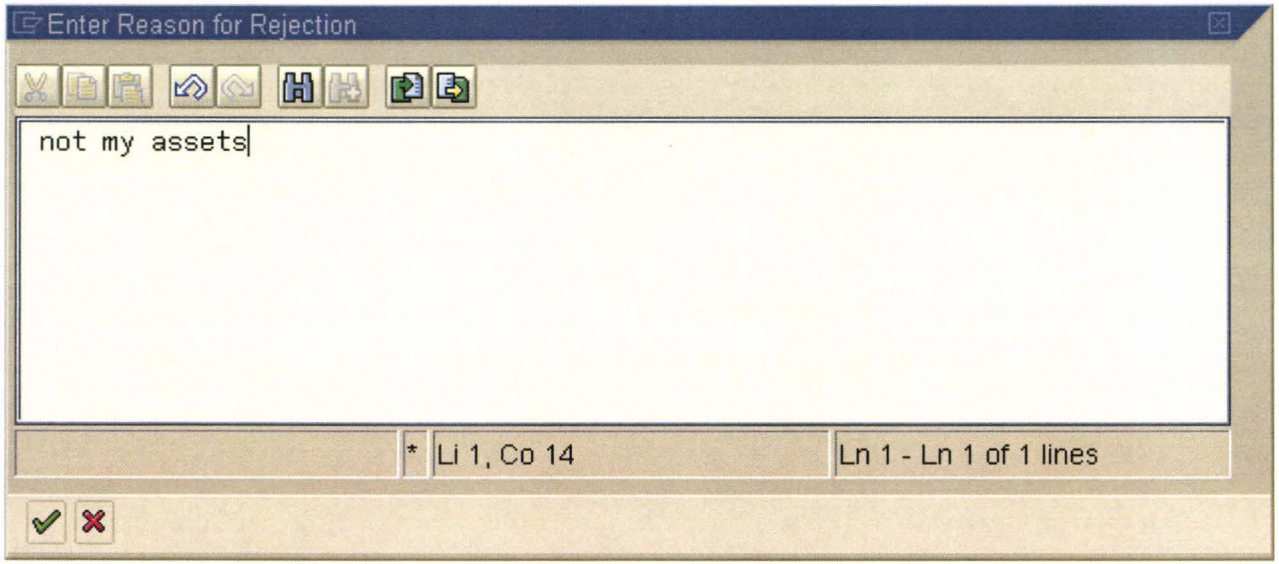


1. Accept – Updates the Asset Record with new Responsible Cost Center
2. Reject – Asset not updated and staying in Initiator's Inventory
3. Cancel and keep work item in inbox – Receiving Party will process at a later date

Receiving Party Rejection

SCEIS
South Carolina Enterprise Information System

Receiving Party Rejection



1. Reject – Enter a Rejection Reason. Click the Green Check button
2. Item is returned back to the Initiator
3. Initiator Completes Work Item in SAP Inbox
4. Initiator Starts Transfer Process Again using transaction code ZMASTR

SCEIS Web Enhancement Request

Requestors name:	
Date/Time of Request:	10/22/2014 2:48:10 PM
Requestors Email:	
Reporting Users SCEIS ID:	
Requestors Phone:	
Users Agency:	Dept of Motor Vehicles
Has management at users agency approved the submission of this request?:	Yes
Approving Managers Name:	
Approving Managers Email Address:	
Approving Managers Contact Phone Number:	
Title of the Request:	Asset Transfer Process
Describe the Request:	When utilizing the Responsible Call Center function in the Asset Shell, we would like to use the asset transfer process with workflow to avoid the paper trail that we have now. Secondly, we want to see if it is possible to use personnel numbers instead of responsible cost center. If that is not possible, we want to see if there is a way to set up responsible cost center codes that are different than our cost center codes.
Explanation of impact to agencies:	Currently we have to manually complete a transfer receipt form for every asset that is issued to an associate for tracking and accountability. By utilizing the Responsible Call Center function, this will enable tracking of the transferred asset to the individual the asset was assigned to electronically.
Expected return:	By utilizing this process it will provide an efficient means for receiving and transferring assets within our agency. It will reduce administrative hours and streamline the current process resulting in cost and time savings to our agency.
Risks:	Loss of efficiency and unnecessary costs and time wasted to complete an asset transaction
Date Submitted:	10/22/2014
Date Requested:	ASAP

SCEIS Data Import Verification

In going beyond the original scope of this paper, the premise exists that not only can transfer sheets be replaced by an electronic system; the data entered into such a system could be exported into SCEIS / SAP overnight. This would totally eliminate the need for manual data entry from a vendor supplied solution to SCEIS / SAP. Like a similar SCMDV application, the theory is that any file that is exported to SCEIS / SAP overnight can be received as "Parked" by the system. Parked refers to the newly acquired SCEIS data as being successfully migrated into the database. At this juncture, the newly acquired records are stored, but not approved within SCEIS / SAP system. While in the 'Parked' status, an email with a PDF attachment is sent to the SCDMV. This viewable and printable PDF contains a listing all the records sent the previous day.

In addition to the email and PDF, a file is placed on an SCEIS FTP server which is automatically imported by the SCDMV into the agency's vehicle and customer credential Phoenix application. A status field in the application is processed whereby each related transaction is now flagged and deemed 'posted.'

Send to SCEIS

Business: This means the SCDMV Asset Manager has a batch of eInventory 'transfers' to send to SCEIS

Technical: The SCDMV eInventory tracking system creates and/or exports a 'transfer sheet' data file and that data file is Ftp'd to SCEIS.

SCEIS receives SCDMV file

Business: Nothing

Technical:

1. SCEIS *imports* SCDMV data file and sets the status to 'PARKED' in the SCEIS Database.
2. SCEIS *creates* a 'PARKED' file that is put on the SCEIS FTP server.
3. SCDMV has a batch job that looks for 'PARKED' files on the SCEIS FTP Server
4. SCDMV pulls down the 'PARKED' file from SCEIS FTP server and *imports* it into the SCDMV eInventory database which updates the status from 'SENT' to 'PARKED' for all eInventory 'transfers' in the file.

Debra reviews the data we sent within SCEIS

Business: Asset Manager checks each eInventory 'transfer' that is in the 'PARKED' status. Asset Manager *approves* and/or *fixes* each entry as necessary.

Technical:

1. Every morning SCEIS puts an 'APPROVED' file on their FTP server for the previous day's *approved* records
2. SCDMV has a batch job that looks for 'APPROVED' files on the SCEIS FTP Server
3. SCDMV pulls down 'APPROVED' file from the SCEIS FTP server and imports it into the SCDMV eInventory database which updates the status from 'PARKED' to 'APPROVED' for all eInventory 'transfers' in the file.

South Carolina Enterprise Information System

Interface Operations Guide (IOG)

IF407 – Asset Master Data Update

Introduction

Document Purpose and Organization

The Interface Operations Guide (IOG) contains the interface specific information required for State of South Carolina Agencies to integrate with the SCEIS system. Each interface will contain a separate IOG with specific information. The IOG information will include the ADS number, description, file name(s), examples of load reports, frequency, run schedule, error conditions, etc. Additionally, the IOG will contain the file layout for the interface.

General system updates can be found on the SCEIS website, http://www.sceis.sc.gov

Journal Entry Inbound Interface

Interface ADS Number	IF407
Inbound/Outbound	Inbound
Interface Title	Asset Update Inbound Interface
Interface Description	This interface provides an automated method for users to update Asset Master Data. The sending agency will translate their current legacy system data into SAP data elements and upload through the Interface.
Version	Version 7.1
SCEIS Contact	
Source System	State Agency Subsystems
Destination System	SCEIS
Interface Type	Tab-delimited text file
Mode	Asynchronous
Frequency	The Agencies will transmit the interface files as needed. Files have the option of being processed upon receipt by SCEIS (at 30 to 45 minute intervals throughout the day) or being held and processed in a batch cycle at night.

File Name(s)	Inbound interface file: <bus. area>.<source system>.if407.asset.inbound.<date/time stamp> Example: u120.a1.if407.asset.inbound.101215083012 --- Error file: <bus. area>.<source system>.if407.asset.errors.<original date/time stamp>.<creation date/time stamp> Example: u120.a1.if407.asset.errors. 101215083012.101215091512 ---
FTP Path	Determined by the security requirements of the sending Agency.
Manual Upload	Users with appropriate permissions will be able to upload properly formatted, tab-delimited text files to the interface for processing. The SAP transaction code for uploading this entry data file is ZIFXXX_ASSET_UPLOAD.

Version Control

Version	Description of Change	Author	Date
1.0	Initial Version		01/14/2011
2.0	Added Responsible Cost center		01/24/2011
3.0	Added Inventory Number and Evaluation group 2		02/11/2011
4.0	Corrected the sequence of data stream		03/09/2011
5.0	File name change to "Asset" from "Asset Update".		4/11/2011
6.0	Added extra fields to make this interface to be used by all Agencies	M Karanth	07/06/2011
7.0	Added the delete capability and Inventory fields and changed the IOG name to just "asset Inbound' and not "HMMS Inbound"	M Karanth	01/31/2012
7.1	Corrected numbering of file layout	D. Boyer	07/22/2012

File Layout

ID Segment

1	Business Area	R	CHAR	4	XXXX	Agency Code - e.g. U120
2	Source System Identifier	R	CHAR	2	XX	Agency specific Code to represent source system. Agencies discretion to use 2 unique characters as needed.
3	File Date	R	DATE	8	YYYYMMDD	File creation date - e.g. 20101215
4	File Time	R	TIME	6	HHMMSS	File creation time in 24hr format - e.g. 183622
5	Transaction Key	R	CHAR	4	XXXX	Identifies the type of SAP transaction: Key Transaction AM01 Update fields on Asset Master Data
6	Approval Status	R	CHAR	1	X	1 = Agency approval Space = no Agency approval
7	Process	R	CHAR	1	X	1 = Deferred Batch processing Space = Immediate processing
8	Approval Grouping	R	CHAR	1	X	Space. Currently not used.

Data Segment

9	Header Sequence Number	R	NUMC	4	9999	Identifies the record number on interface file for reporting. Number should begin with 1 and incremented by 1 for each additional record.
10	Main Asset Number	R	CHAR	12	X(12)	SAP Main Asset Number
11	Asset Subnumber	R	CHAR	4	X(4)	SAP Asset Subnumber
12	Asset Desc	R	CHAR	50	X(50)	Asset description
13	Additional asset description	O	CHAR	50	X(50	Additional asset description
14	Asset main number text	O	CHAR	50	X(50)	Asset main number text
15	Asset Responsible CC (required for DOT only)	O	CHAR	10	X(10)	Responsible Cost Center
16	Inventory	R	CHAR	25	X(25)	Inventory Number
17	Serial Number	O	CHAR	18	X(18)	Serial Number
18	Eval Group 2 (required for DOT only with codes 70 & 79)	O	CHAR	4	X(4)	Evaluation group 2
19	REGION	O	CHAR	40	X(40)	Region
20	SITE	O	CHAR	75	X(75)	Site
21	COUNTY	O	CHAR	3	X(3)	County Code

22	BUILDING	O	CHAR	40	X(40)	Building
23	ROOM	O	CHAR	20	X(20)	Room
24	CUSTODIAN	O	CHAR	50	X(50)	Custodian
25	PROPERTY_TRF	O	NUMC	6	X(6)	Property Transfer
26	PROPERTY_REC	O	NUMC	6	X(6)	Property Receipts
27	FEDPARTPER (required for DOT only)	O	DEC	5	9(3)v99	Federal Participation Share Percentage
28	RAUMN	O	CHAR	8	X(8)	Room
29	TPLNR	O	CHAR	30	X(30)	Functional Location
30	KFZKZ	O	CHAR	15	X(15)	License plate no. of vehicle
31	PERNR	O	NUMC	8	X(8)	Personnel Number
32	ORD41	O	CHAR	4	X(4)	Evaluation group 1
33	ORD43	O	CHAR	4	X(4)	Evaluation group 3
34	ORD44	O	CHAR	4	X(4)	Evaluation group 4
35	GDLGRP	O	CHAR	8	X(8)	Evaluation group 5 (LVA Classification)
36	INVDATE	O	DATE	8	YYYYMMDD	Last Inventory Date
37	NOTE	O	CHAR	15	X(15)	Supplementary Inventory Specifications

Note:

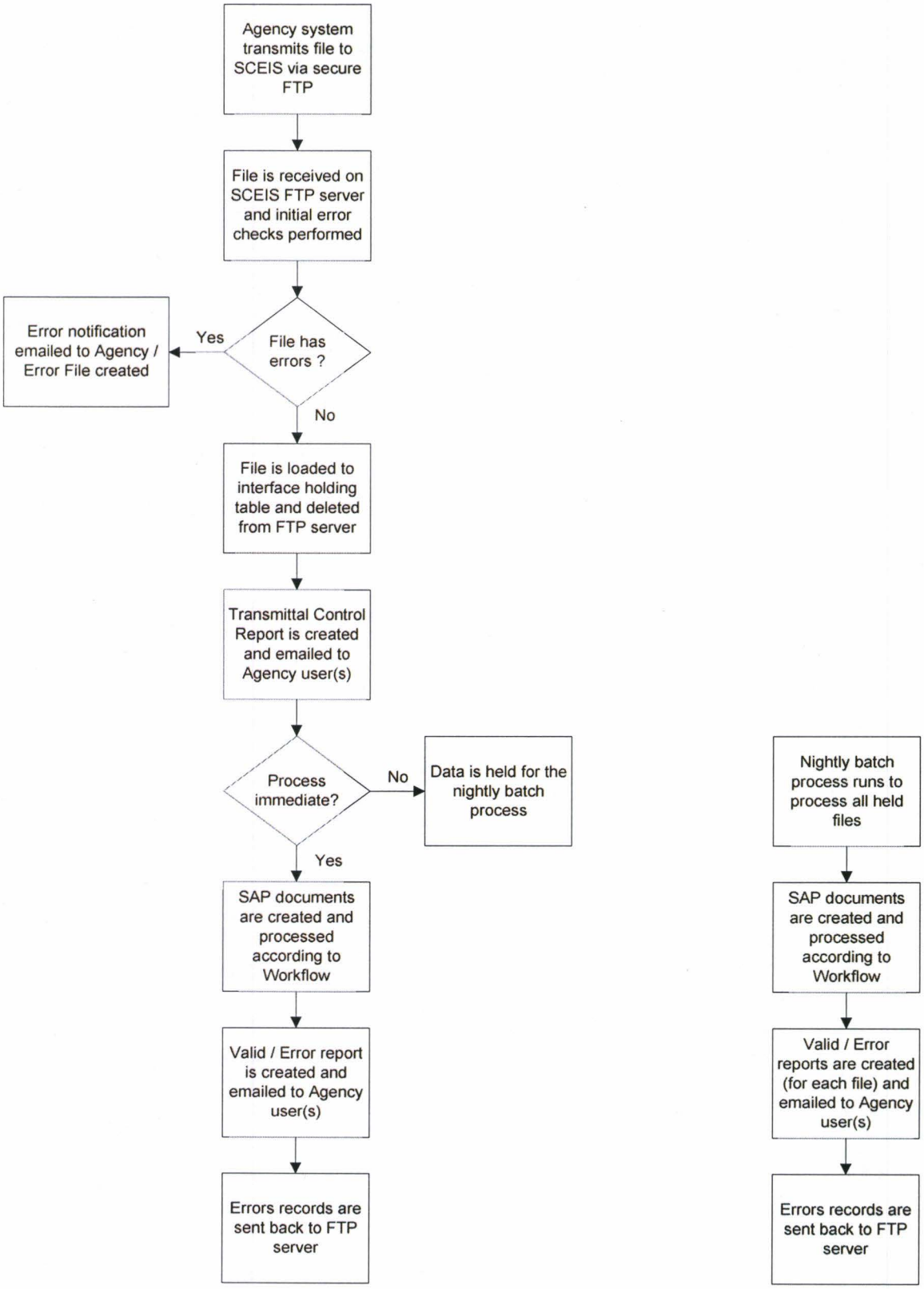
Every record on the input file contains all data fields. The ID and Header segment fields are repeated on every record.

Deletion of Data:

The program will not update an Asset field if the field content in the file is blank. In order to delete data from a field, the proper deletion code must be used. If the field is a character, the uppercase letters "DEL" in the field content will delete the data in the Asset. If the field is numeric, the field must be filled with 9's. The number of 9's should equal the field length. Listed below are examples.

	Data	Field type	Value to Delete Data
1	Asset Desc	CHAR	DEL
2	Additional asset description	CHAR	DEL
3	Asset main number text	CHAR	DEL
4	Asset Responsible CC (for DOT use)	CHAR	DEL
5	Inventory Number	CHAR	DEL
6	Serial Number	CHAR	DEL
7	Eval Group 2	CHAR	DEL
8	REGION	CHAR	DEL
9	SITE	CHAR	DEL
10	COUNTY	CHAR	DEL
11	BUILDING	CHAR	DEL
12	ROOM	CHAR	DEL
13	CUSTODIAN	CHAR	DEL
14	PROPERTY_TRF	NUMC	999999
15	PROPERTY_REC	NUMC	999999
16	FEDPARTPER(for DOT use)	DEC	999.99
17	RAUMN (Room)	CHAR	DEL
18	TPLNR (Functional Location)	CHAR	DEL
19	KFZKZ (License Number)	CHAR	DEL
20	PERNR (Personnel Number)	NUMC	99999999
21	ORD41 (Evaluation group 1)	CHAR	DEL
22	ORD43 (Evaluation group 3)	CHAR	DEL
23	ORD44 (Evaluation group 4)	CHAR	DEL
24	GDLGRP (Evaluation group 5)	CHAR	DEL
25	INVDATE	DATE	99999999
26	NOTE	CHAR	DEL

Process Flowchart



Report Examples

There are several reports that are emailed back to the agency based on the Source System ID field. Email recipients are associated with each agency system and the reports are sent as email attachments in a PDF format. The following are examples of a notification report, a successful report and an error report. A transmittal notification report is sent when the file is received by the system. The successful and error reports are sent when the data is processed by the system. The reports may vary slightly based on the interface type, but will be similar to the examples shown.

The following is an example of a transmittal notification report:

```
User ID  : JDAVIS                                          South Carolina Enterprise Information Systems(SCEIS)
System   : ECD   / 020                                                    Interface Execution Log
Program  : ZFI_ALL_RPT_STARS_LOG
------------------------------------------------------------------------------------------------------------

Agency..............: H710 WIL LOU GRAY OPPORTUN SCH
Inbound File........: C:\ftp\h710\h710.B1.if383.directpay.inbound.091013115800-2.txt
Run Date and Time...: 01/21/2010 11:33:09

Header Information..: Business Area....: H710
                      Source System....: B1 Surplus Property B1
                      File Date........: 01/21/2010
                      File Time........: 121107
                      Approval Status..:
                      Transaction Key..: AP05
                      Process Ind......:  Immediate Processing
                      Approval Grouping: 1

Total Number of Documents......:              10
Total Number of Line Items.....:              24
Total Amount of Documents......:          890.00


Email Recipients...: JDAVIS@CG.SC.GOV
```

The following is an example of a successful report:

```
User ID  : JDAVIS                                          South Carolina Enterprise Information Systems(SCEIS)
System   : ECD   / 020                                                   Interface Execution Log
Program  : ZFI_ALL_RPT_STARS_LOG
------------------------------------------------------------------------------------------------------------------

Agency..............: H710 WIL LOU GRAY OPPORTUN SCH
Inbound File........: C:\ftp\h710\h710.B1.if383.directpay.inbound.091013115800-2.txt
Process Date / Time.: 01/21/2010 113423

Header Information..: Business Area....: H710
                      Source System....: B1 Surplus Property B1
                      File Date........: 01/21/2010
                      File Time........: 12:11:07
                      Approval Status:..
                      Transaction Key..: AP05
                      Process Ind......:  Immediate Processing
                      Approval Grouping: 1

Seq            Fiscal                                                  Total
Num    Doc Num  Year   Vendor   Image ID     Invoice                  Amount  Message

0001 3000005739 2010 0999900013 3000005739 jeff1 1                      35.00 Document 3000005739 was posted in company code SC01
0002 3000005740 2010 0999900013            jeff1 2                      10.00 Document 3000005740 was posted in company code SC01
0003 3000005741 2010 0999900013            jeff1 3                     100.00 Document 3000005741 was posted in company code SC01
0004 3000005742 2010 0999900013            jeff1 4                     200.00 Document 3000005742 was posted in company code SC01
0006 3000005743 2010 0999900013            jeff1 1                      35.00 Document 3000005743 was posted in company code SC01
0007 3000005744 2010 0999900013            jeff1 2                      10.00 Document 3000005744 was posted in company code SC01
0008 3000005745 2010 0999900013            jeff1 3                     100.00 Document 3000005745 was posted in company code SC01
0009 3000005746 2010 0999900013            jeff1 4                     200.00 Document 3000005746 was posted in company code SC01

Total Number of Documents..:                8
Total Amount of Documents..:           690.00


Email Recipients..........: JDAVIS@CG.SC.GOV
```

The following is an example of an error report:

```
User ID  : JDAVIS                                          South Carolina Enterprise Information Systems(SCEIS)
System   : ECD   / 020                                                   Interface Execution Log
Program  : ZFI_ALL_RPT_STARS_LOG
------------------------------------------------------------------------------------------------------------------

Agency..............: H710 WIL LOU GRAY OPPORTUN SCH
Inbound File........: C:\ftp\h710\h710.B1.if383.directpay.inbound.091013115800-2.txt
Process Date / Time.: 01/21/2010 113423

Header Information..: Business Area....: H710
                      Source System....: B1 Surplus Property B1
                      File Date........: 01/21/2010
                      File Time........: 12:11:07
                      Approval Status:..
                      Transaction Key..: AP05
                      Process Ind......:  Immediate Processing
                      Approval Grouping: 1

Seq   Trans                                     Total    Line          Line
Num    Key    Vendor      Invoice               Amount   Item         Amount     Message

0005   AP05 0999900013 jeff1 5                  200.00    001         100.00     *Balance in transaction currency

0010   AP05 0999900013 jeff1 5                  200.00    001         100.00     *Balance in transaction currency

Total Number of Documents..:                2
Total Number of Line Items.:                2
Total Amount of Documents..:           400.00


Email Recipients..........: JDAVIS@CG.SC.GOV
```

Miscellaneous Processing Notes

- The file format is a TAB-delimited text file.

- All records within the file have three parts.

  - ***ID* Segment** contains systems information to specify how the file will be processed. It also contains information to uniquely identify a transaction by the source system that created it. Important: The data in the ID Segment should be the same for every record on the file.
  - ***HEADER* Segment** has the header level information for the SCEIS transaction.
  - ***DATA* Segment** contains the line item information for the SCEIS transaction.

- Each file sent for processing will be uniquely identified by the combination of Business Area, Source System ID, File Date and File Time. Each combination of this data will be logged by the system and any subsequent files sent with same combination will be rejected as duplicates.

- Agency contact email addresses will need to be provided to SCEIS for each agency / subsystem that will use the interface. This information will be requested as part of a testing and acceptance process for each agency system. Transmittal controls, Valid / Error reports, etc will be emailed to these designated users as files are processed by the interface. In the examples below, notifications for system "A1" would be emailed to Joe and Mary; Tom would get the emails for the "B1" system.

Agency	System	Email
U120	A1	joe@agency.gov
U120	A1	mary@agency.gov
U120	B1	tom@agency.gov

- As each interface file is processed, an error file (containing only the documents that do not post) will be written back to the same directory as the inbound file. The file layout of the error file is the same as the inbound file. The error codes for the documents are sent back via the error report. Agencies can opt out of this error file creation on a per-system basis.

General FTP Processing Notes

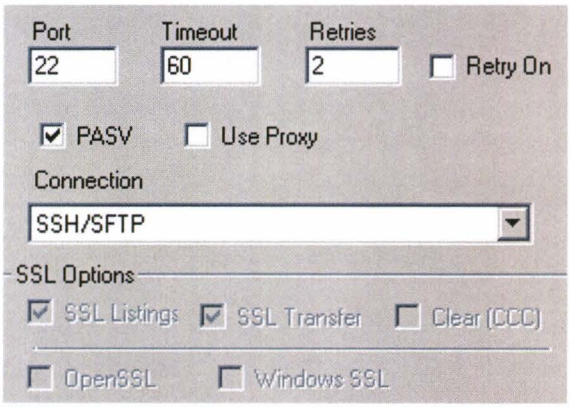
The preferred method of data transfer will be via secure FTP, and SCEIS will host an FTPS server for this purpose.

There will be a folder structure set up on the server for each business area. Sub-folders will be created if necessary based on the security requirements of the sending agency. Security will be set up appropriately on the folders so that users will only have access to their data.

In the example below there are separate AR and AP interface folders for business area E120. On the other hand for E160, all interfaces would use the same FTP folder - "/e160".

```
/f030
        /sd
        /ar
        /ap
        /vendor
/e160
/e200
        /fi
        /mm
```

To send files to SCEIS-inbound or receive files from SCEIS-outbound interfaces, FTPS client software will be used on the agency side. Example FTP connection options are shown in the following print screen. (Using the CoreFTP desktop client software – in other clients, the options may be slightly different.)



For questions or concerns regarding the File Transfer Protocol procedures, please contact the SCEIS interface team at interfaces@sceis.sc.gov.

Appendix J: Case Study

The following scenario described below based on actual events and people with the South Carolina Department of Motor Vehicles "SCDMV" and the South Carolina Department of Transportation "SCDOT" respectively is an ideal case study and fodder for moving to a paperless, real-time based tracking system. Several of the problematic issues with the SCDMV's current paper based inventory tracking system are clearly seen in the people who were called upon to use it and in their interactions with it.

SCDOT on Park Street in downtown Columbia received the SCDMV annual audit from Asset Management sometime in April of 2014. Their SCDMV assigned assets as listed in SCEIS as of March 26, 2014 consisted of two Dell workstations; a Dell Optiplex 960 and a Dell Optiplex 755 respectively. As was the case for all those who received assigned self-audits, they were to be processed and returned to the Asset Manager no later than May 31, 2014.

In the late afternoon of July 31, 2014, the SCDMV Desktop Supervisor received an email from the Information Technology Officer requesting confirmation that the two workstations mentioned above were picked from SCDOT. Prior to being forwarded to the Desktop Supervisor, the ITO's email had already flowed through the hands of seven other individuals, comprising directors, managers and employees. The last referenced person in the email stated SCDOT no longer had the two loaned SCDMV assigned computers. They were indeed picked up by SCDMV staff months ago.

The Desktop supervisor working with his staff was able within twenty minutes to confirm the loaned SCDMV assets to SCDOT were indeed picked up. The transfer sheet was dated April 10, 2014. One of the SCDOT employees had signed off on the transfer per the pink copy retained by the SCDMV employee who picked them up.

Working with the SCDMV Supply Specialist, it was discovered that according to SCEIS / SAP, the two workstations being discussed were still listed as residing at SCDOT. However, based on documentation within the possession of the Supply Specialist, the reality was that those two workstations were residing at the SCDMV warehouse. They were picked up for state surplus on May 13, 2014. The ITO was notified of the current status and provided the updated information to the appropriate personnel at SCDOT. It was later determined that the original teal copy {the transferee's copy} of the transfer sheet had been misplaced at SCDOT and therefore was not available during the DMV audit reconciliation. When checked within SCEIS on August 15, 2014, the two Dell Optiplex workstations were still listed as being located at SCDOT, Park Street, Columbia, SC.